NPL Site Narrative for Carson River Mercury Site

CARSON RIVER MERCURY SITE
Lyon/Churchill Counties, Nevada

Federal Register Notice: August 30, 1990

Conditions at proposal (October 26, 1989): The Carson River Mercury Site (CRMS) consists of: (1) sediments in an approximately 50-mile stretch of the Carson River in Lyon and Churchill Counties, beginning between Carson City and Dayton, Nevada, and extending downstream through the Lahontan Reservoir to Stillwater National Wildlife Refuge; and (2) tailing piles associated with the river.

In the late 1800s, ore mined from the Comstock Lode near Virginia City was transported to any of 75 mills, where it was crushed and mixed with mercury to amalgamate the gold and silver. The availability of water power made 12 mills along the Carson River in the Brunswick Canyon area become dominant.

Mercury-contaminated tailings piles which resulted from the mills have been found 5 miles up Brunswick Canyon, 3 miles up Six Mile Canyon, and within the Carson Plain. Areas near the Comstock Lode where extensive mining occurred, such as in Gold Canyon, may also be major potential sources of tailings. Rain transports mercury from the tailing piles to the Carson River, where the Nevada Division of Environmental Protection (NDEP) has documented extensive mercury contamination. An estimated 7,500 tons of mercury were lost in

the milling process during the 30-year peak of the Comstock Lode, of which only about 0.5% was later recovered. Much of the remaining mercury was incorporated in the mill tailings.

Elevated levels of mercury attributed to the piles were detected in the river from above the Dayton area through the Lahontan Reservoir to the cutoff of the Stillwater Slough, as well as in Six Mile Canyon Creek.

Because CRMS extends over such a large area, it potentially affects several sources of ground water, among them the Dayton Valley Aquifer. Ground water in the aquifer is as shallow as 10 feet near the river, and soils are permeable sands and gravel. These conditions facilitate movement of contaminants into ground water. An estimated 1,400 people obtain drinking water from wells within 3 miles of the site, the nearest within 2,000 feet.

Approximately 1,200 acres of food and forage crops are irrigated by the Carson River between Dayton and the Lahontan Reservoir.

Status (August 30, 1990): EPA is considering various alternatives for the site.

[The description of the site (release) is based on information available at the time the site was evaulated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]